

PLAT Results For: Stanly 6/20/2012 2:04:48 PM

INPUTS

Calendar Year: 2012
 County: Stanly
 Producer Identifier: hpf
 Tract Number: 10699
 Field Number: 10
 Soil Series: GeB: Georgeville silt loam, 2 to 8 percent slopes
 Crop: Soybeans (Double Cropped - Manured) : Conservation Tillage
 - minimum residue
 BMPs: Buffer Width Width = 5 ft.
 Fertilizers: Swine-Lagoon sludge
 Yearly Applied Amount: 3 1000 gal
 Lb P2O5: 49.67 lb
 Application Method: All other surface application
 Soil Loss: 2 t/ac/yr
 Receiving Slope Distance 0-9 ft
 Soil Test 0" - 4" 245
 WV Factor (DATABASE) 1.1
 Hydrologic Condition: GOOD

OUTPUTS

PARTICULATE P	=	25
SOLUBLE P	=	7
LEACHATE P	=	0
SOURCE P	=	14
TOTAL P RATING	=	46 (MEDIUM)

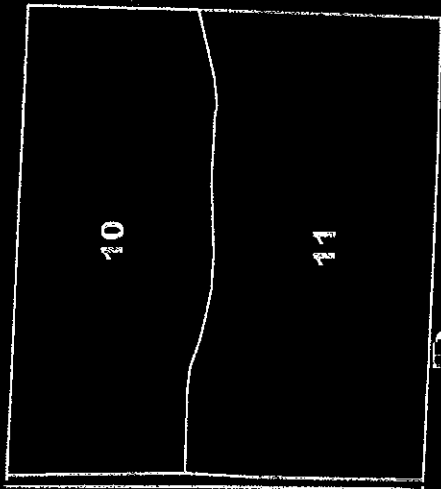
PLAT Results For: Stanly 6/20/2012 2:06:26 PM

INPUTS

Calendar Year: 2012
 County: Stanly
 Producer Identifier: hpf
 Tract Number: 10699
 Field Number: 11
 Soil Series: GeB: Georgeville silt loam, 2 to 8 percent slopes
 Crop: Soybeans (Double Cropped ~ Manured) : Conservation Tillage
 - minimum residue
 BMPs: Buffer Width Width = 5 ft.
 Fertilizers: Swine-Lagoon sludge
 Yearly Applied Amount: 5 1000 gal
 Lb P2O5: 49.67 lb
 Application Method: All other surface application.
 Soil Loss: 1 t/ac/yr
 Receiving Slope Distance 10-19 ft
 Soil Test 0" - 4" 245
 WV Factor (DATABASE) 1.1
 Hydrologic Condition: GOOD

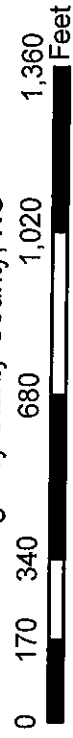
OUTPUTS

PARTICULATE P	=	11
SOLUBLE P	=	7
LEACHATE P	=	0
SOURCE P	=	23
<hr/>		
TOTAL P RATING	=	41 (MEDIUM)



Farm 6052 Tract 10699

United States Department of Agriculture
Farm Service Agency Stanly County, NC



Disclaimer: Wetland indentifiers do not represent the size, shape, or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact wetland boundaries and determinations, or contact NRCS. Roads layer provided by Dynamap/2000 Tele Atlas.

Crop Ac: 18.97 CRP Ac: 0

Wetland Determination Identifiers

- Restricted Use
- ▽ Limited Restrictions
- Exempt from Conservation Compliance Provisions

CLU Boundary

CRP Boundary

1/11/2010



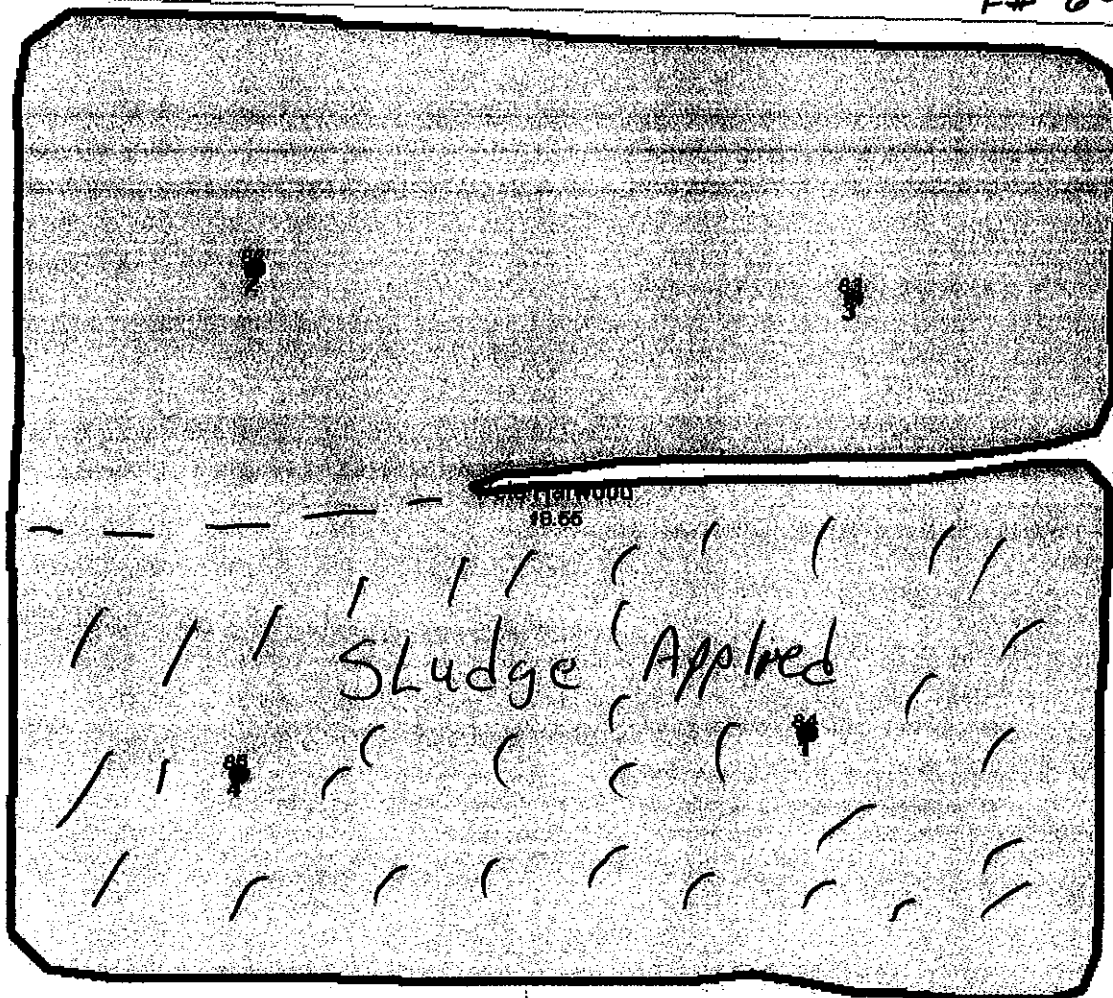
CLU: AC HEL-CRP
10: 8.58 HEL
11: 10.39 HEL

Prepared For: Rodney Honeycutt
Farm: Rodney Honeycutt
Field: Pete Harwood
County: Stanly, NC

Crop Zone:
Crop Year:

Prepared By:

T 10699
F# 6052



Data Values

Attribute	ObjectID
Records	4
Empty	0
Average	2.500
Min	1.000
Max	4.000

ObjectID (none)

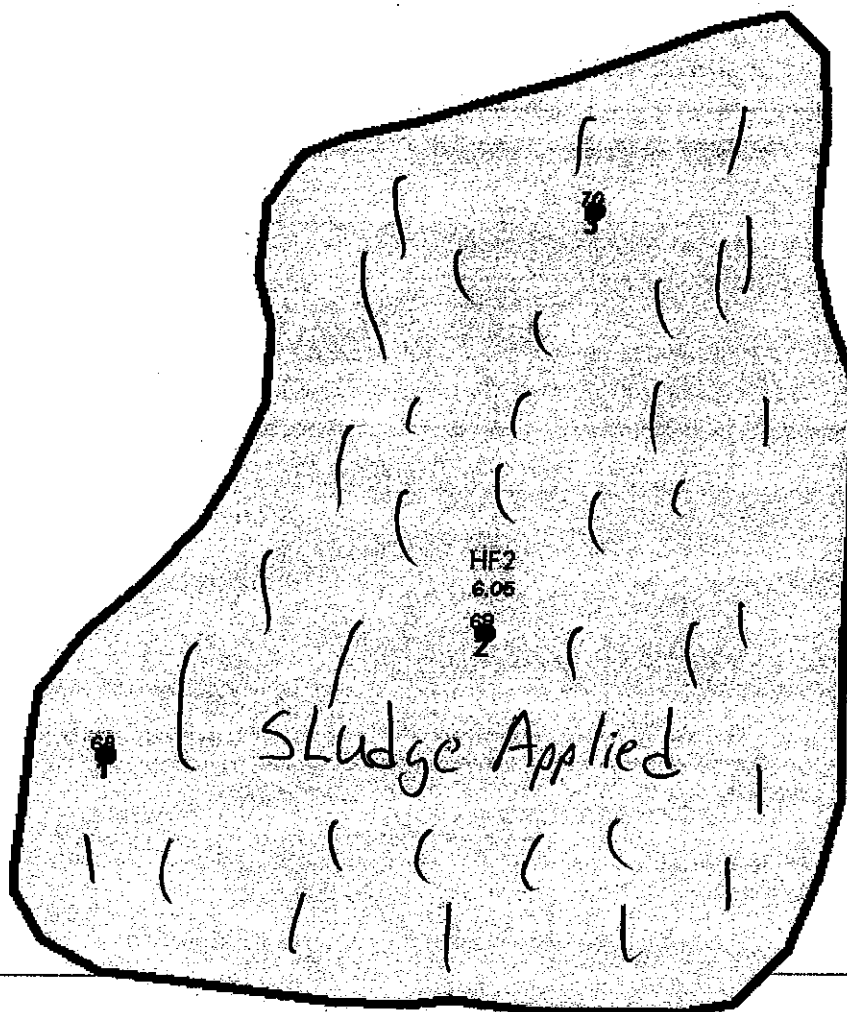
1.000 1.750 2.500 3.250 4.000



Layer Map

Prepared For: Rodney Honeycutt
Farm: Honeycutt Farm
Field: HF2
County: Stanly, NC

Crop Zone:
Crop Year:
Prepared By:



Data Values

Attribute	ObjectID
Records	3
Empty	0
Average	2.000
Min	1.000
Max	3.000

ObjectID (none)

1.000 1.500 2.000 2.500 3.000



PLAT Results For: Stanly 6/21/2012 8:23:01 AM

INPUTS

Calendar Year: 2012
County: Stanly
Producer Identifier: hpf
Tract Number: 1226
Field Number: 1
Soil Series: TbB: Tatum channery silt loam, 2 to 8 percent slopes
Crop: Soybeans (Double Cropped - Manured) : Conservation Tillage
- minimum residue
BMPs: Buffer Width Width = 10 ft.
Fertilizers: Layer-slurry
Yearly Applied Amount: 2 1000 gal
Lb P2O5: 58.94 lb
Application Method: All other surface applications
Soil Loss: 2 t/ac/yr
Receiving Slope Distance 10-19 ft
Soil Test 0" - 4" 311.75
WV Factor (DATABASE) 1.1
Hydrologic Condition: GOOD

OUTPUTS

PARTICULATE P	=	27
SOLUBLE P	=	9
LEACHATE P	=	0
SOURCE P	=	13
<hr/>		
TOTAL P RATING	=	49 (MEDIUM)

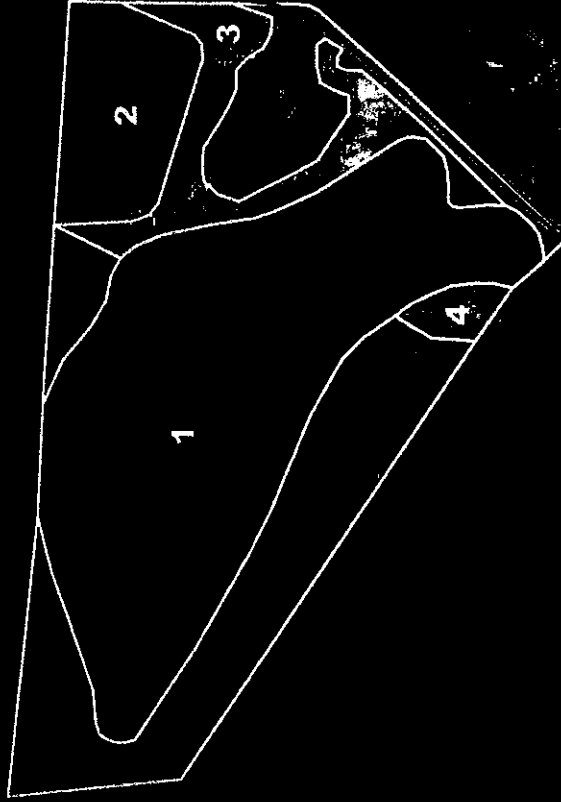
PLAT Results For: Stanly 6/21/2012 8:24:54 AM

INPUTS

Calendar Year: 2012
County: Stanly
Producer Identifier: hpf
Tract Number: 1226
Field Number: 2
Soil Series: TbB: Tatum channery silt loam, 2 to 8 percent slopes
Crop: Soybeans (Double Cropped - Manured) : Conservation Tillage
- minimum residue
BMPs: Buffer Width Width = 10 ft.
Fertilizers: Layer-slurry
Yearly Applied Amount: 2 1000 gal
Lb P2O5: 58.94 lb
Application Method: All other surface applications
Soil Loss: 2 t/ac/yr
Receiving Slope Distance 10-19 ft
Soil Test 0" - 4" 311.75
WV_Factor (DATABASE) 1.1
Hydrologic Condition: GOOD

OUTPUTS

PARTICULATE P	=	27
SOLUBLE P	=	9
LEACHATE P	=	0
SOURCE P	=	13
<hr/>		
TOTAL P RATING	=	49 (MEDIUM)



Farm 6036 Tract 1226

United States Department of Agriculture
 Farm Service Agency Stanly County, NC



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Crop Ac: 18.04 CRP Ac: 0

Wetland Determination Identifiers

- Restricted Use
- ▽ Limited Restrictions
- Exempt from Conservation Compliance Provisions

CLU Boundary

CRP Boundary

3/15/2010



CLU: AC HEL-CRP

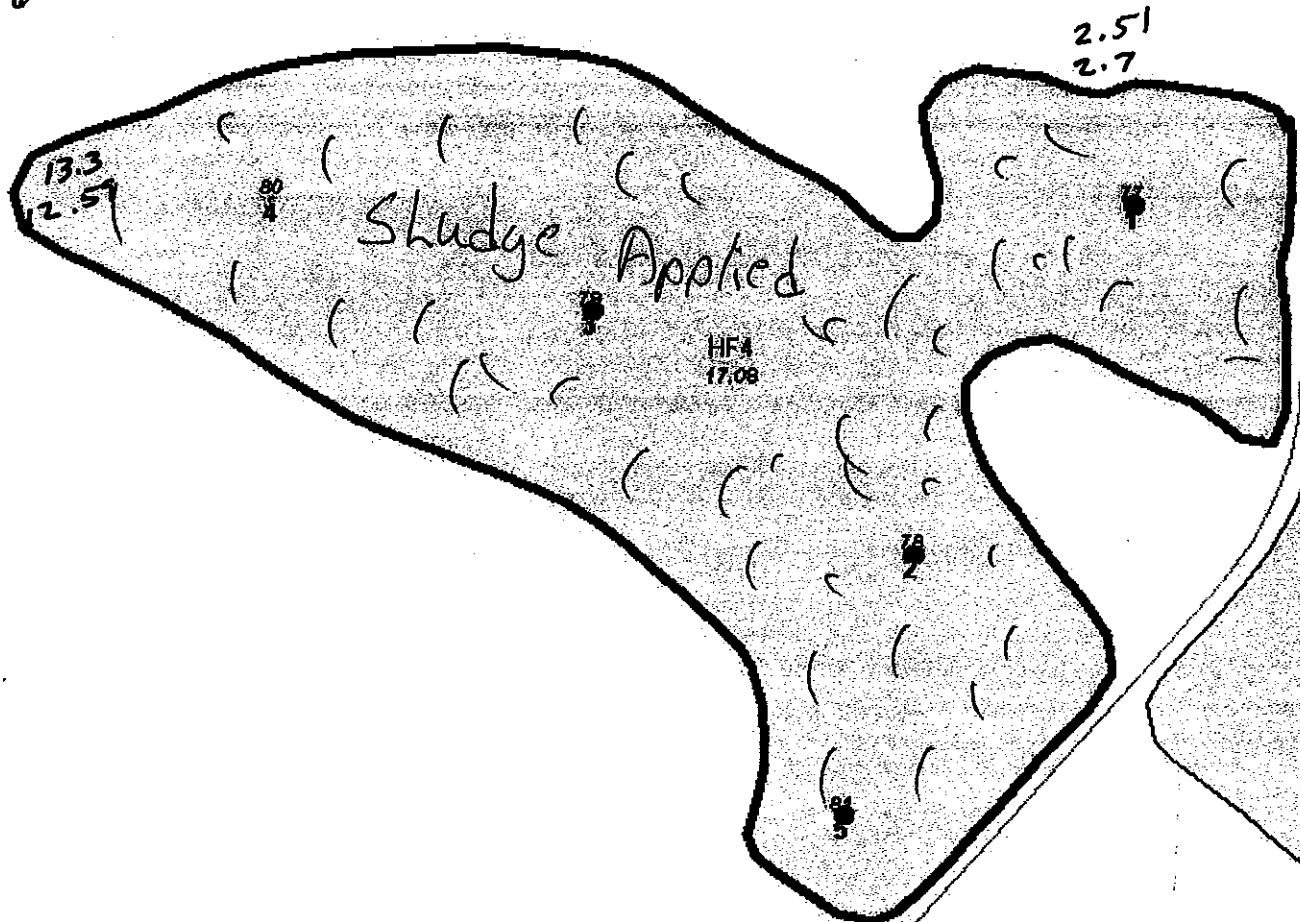
- 1: 12.59 HEL
- 2: 2.51 HEL
- 3: 2.52 HEL
- 4: 0.42 HEL

Layer Map

Prepared For: Rodney Honeycutt
 Farm: Honeycutt Farm
 Field: HF4
 County: Stanly, NC

Crop Zone:
 Crop Year:
 Prepared By:

T 1226
 C# 603b



Data Values

Attribute	ObjectID
Records	5
Empty	0
Average	3.000
Min	1.000
Max	5.000

ObjectID (none)

1.000 2.000 3.000 4.000 5.000



PLAT Results For: Stanly 6/20/2012 1:52:02 PM

INPUTS

Calendar Year: 2012
County: Stanly
Producer Identifier: hpf
Tract Number: 1768
Field Number: 1
Soil Series: GeB: Georgeville silt loam, 2 to 8 percent slopes
Crop: Soybeans (Double Cropped - Manured) : Conservation Tillage
- minimum residue
Fertilizers: Swine-Lagoon liquid
Yearly Applied Amount: 2 ac in
Lb P2O5: 53.4 lb
Application Method: All other surface applications
Soil Loss: 2 t/ac/yr
Receiving Slope Distance 10-19 ft
Soil Test 0" - 4" 239
WV_Factor (DATABASE) 1.1
Hydrologic Condition: GOOD

OUTPUTS

PARTICULATE P	=	28
SOLUBLE P	=	7
LEACHATE P	=	0
SOURCE P	=	6
<hr/>		
TOTAL P RATING	=	41 (MEDIUM)

PLAT Results For: Stanly 5/11/2012 7:04:42 AM

INPUTS

Calendar Year: 2012
County: Stanly
Producer Identifier: hpf
Tract Number: 1768
Field Number: 2
Soil Series: TbB: Tatum channery silt loam, 2 to 8 percent slopes
Crop: Corn (Grain) : Conservation Tillage - high residue
Fertilizers: Swine-Lagoon sludge
Yearly Applied Amount: 5 1000 gal
Lb P2O5: 55.6 lb
Application Method: All other surface applications

Soil Loss: 2 t/ac/yr
Receiving Slope Distance 10-19 ft
Soil Test 0" - 4" 171
WV_Factor (DATABASE) 1.1
Hydrologic Condition: GOOD

OUTPUTS

PARTICULATE P = 25
SOLUBLE P = 3
LEACHATE P = 0
SOURCE P = 19

TOTAL P RATING = 47 (MEDIUM)

PLAT Results For: Stanly 5/11/2012 6:55:08 AM

INPUTS

Calendar Year: 2012
 County: Stanly
 Producer Identifier: hpf
 Tract Number: 1768
 Field Number: 3
 Soil Series: TbB: Tatum channery silt loam, 2 to 8 percent slopes
 Crop: Corn (Grain) : Conservation Tillage - high residue
 Fertilizers: Swine-Lagoon liquid
 Yearly Applied Amount: 2 ac in
 Lb P2O5: 89.4 lb
 Application Method: All other surface applications
 Soil Loss: 2 t/ac/yr
 Receiving Slope Distance 10-19 ft
 Soil Test 0" - 4" 92
 WV_Factor (DATABASE) 1.1
 Hydrologic Condition: GOOD

OUTPUTS

PARTICULATE P	=	13
SOLUBLE P	=	2
LEACHATE P	=	0
SOURCE P	=	7
<hr/>		
TOTAL P RATING	=	22 (LOW)



USDA FSA Farm 6036 Tract 1768

Crop Ac: 75.17 CRP Ac: 0

United States Department of Agriculture
Farm Service Agency Stanly County, NC

0 170 340 680 1,020 1,360 Feet

1/5/2010

CLU Boundary

CRP Boundary

Wetland Determination Identifiers

- *Restricted Use*
- ▽ *Limited Restrictions*
- *Exempt from Conservation Compliance Provisions*

CLU: AC HEL-CRP

1: 36.65 HEL

2: 6.8 HEL

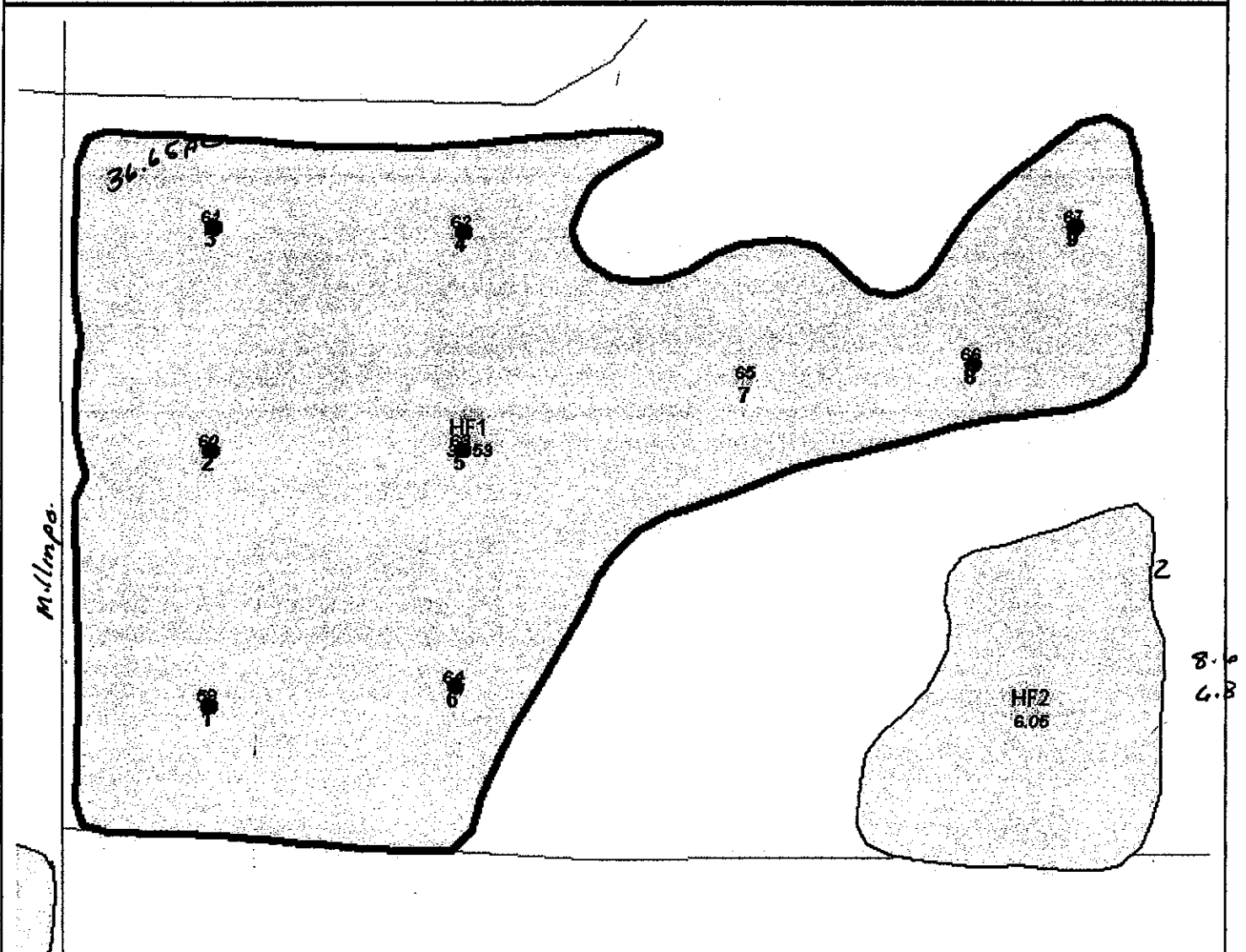
3: 27.02 HEL

4: 4.7 UHEL

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Prepared For: Rodney Honeycutt
 Farm: Honeycutt Farm
 Field: HF1
 County: Stanly, NC

Crop Zone:
 Crop Year:
 Prepared By:



Data Values

Attribute	ObjectID
Records	9
Empty	0
Average	5.000
Min	1.000
Max	9.000

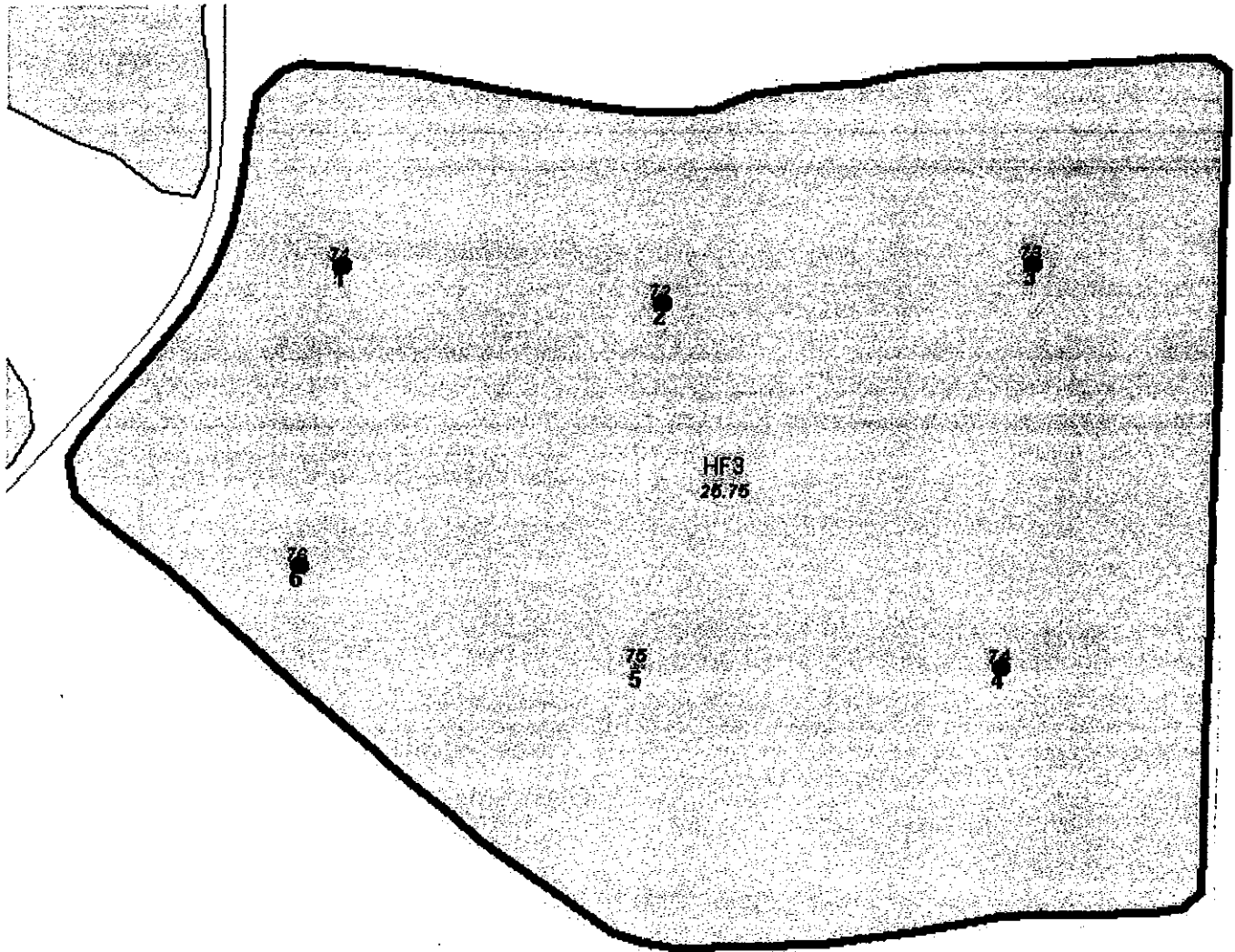
ObjectID (none)

1.000 3.000 5.000 7.000 9.000



Prepared For: Rodney Honeycutt
Farm: Honeycutt Farm
Field: HF3
County: Stanly, NC

Crop Zone:
Crop Year:
Prepared By:



Data Values

Attribute	ObjectID
Records	6
Empty	0
Average	3.500
Min	1.000
Max	6.000

ObjectID (none)

1.000 2.250 3.500 4.750 6.000



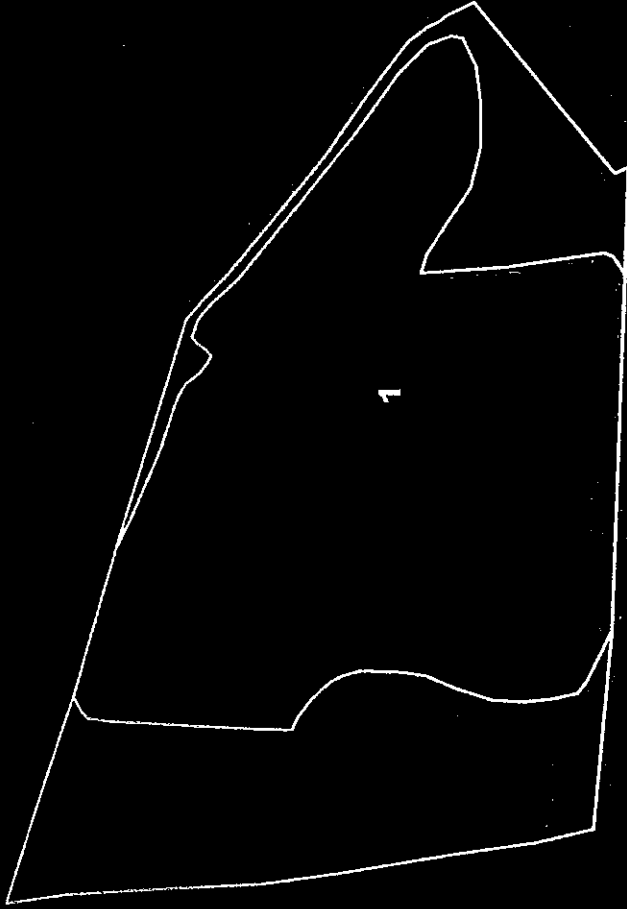
PLAT Results For: Stanly 6/21/2012 7:48:55 AM

INPUTS

Calendar Year: 2012
County: Stanly
Producer Identifier: hpf
Tract Number: 1769
Field Number: 1
Soil Series: TbB: Tatum channery silt loam, 2 to 8 percent slopes
Crop: Soybeans (Double Cropped - Manured) : Conservation Tillage
- minimum residue
BMPs: Buffer Width Width = 10 ft.
Fertilizers: Swine-slurry
Yearly Applied Amount: 5 1000 gal
Lb P2O5: 22.37 lb
Application Method: All other surface applications
Soil Loss: 2 t/ac/yr
Receiving Slope Distance 10-19 ft
Soil Test 0" - 4" 92
WV_Factor (DATABASE) 1.1
Hydrologic Condition: GOOD

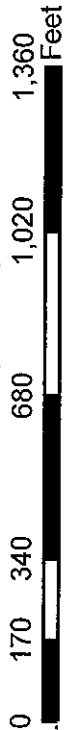
OUTPUTS

PARTICULATE P	=	8
SOLUBLE P	=	3
LEACHATE P	=	0
SOURCE P	=	13
<hr/>		
TOTAL P RATING	=	24 (LOW)



Farm 6036 Tract 1769

United States Department of Agriculture
Farm Service Agency Stanly County, NC



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Crop Ac: 22.9 CRP Ac: 0

Wetland Determination Identifiers

- Restricted Use
- ▽ Limited Restrictions
- Exempt from Conservation Compliance Provisions

CLU Boundary

□ CRP Boundary

1/5/2010

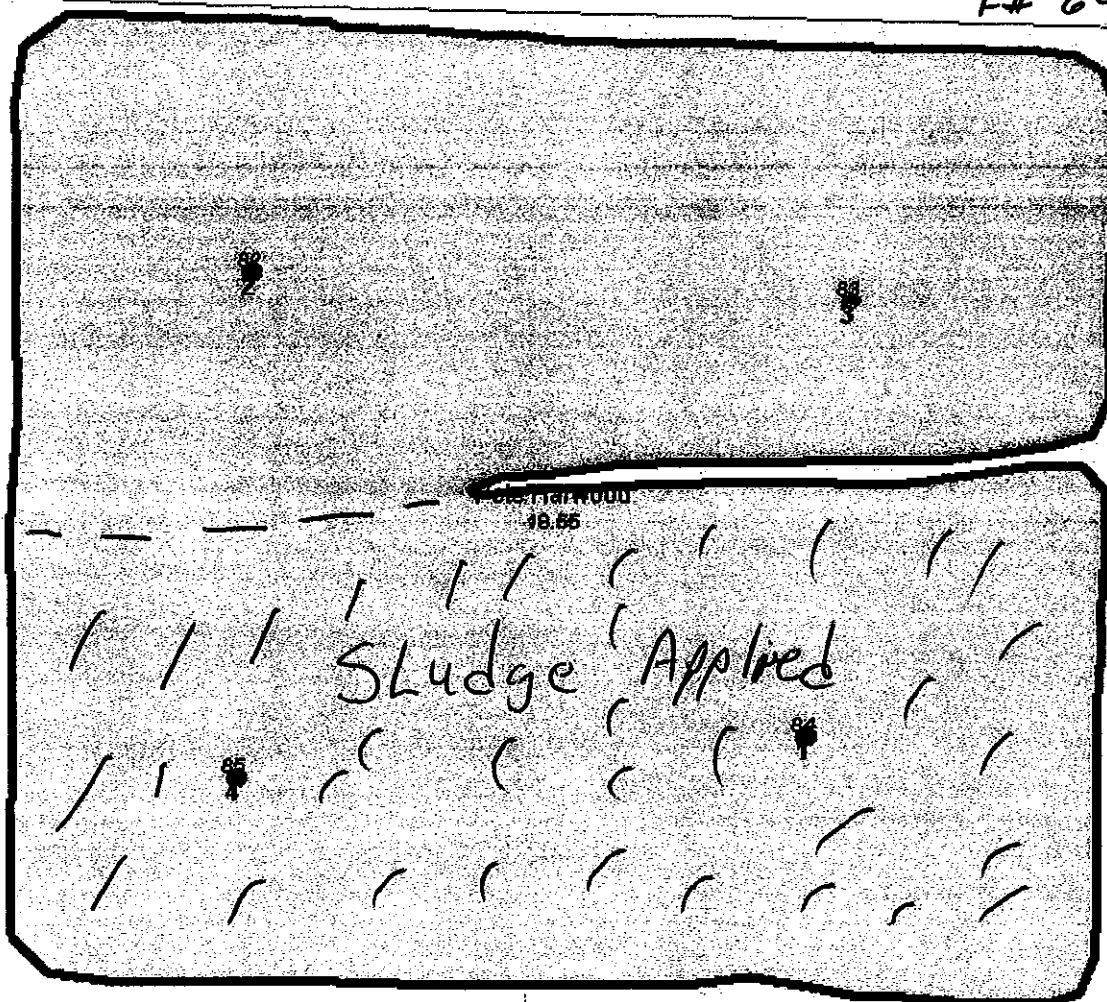


CLU: AC HEL-CRP
1: 22.9 HEL

Prepared For: Rodney Honeycutt
Farm: Rodney Honeycutt
Field: Pete Harwood
County: Stanly, NC

Crop Zone:
Crop Year:
Prepared By:

T 10699
F# 6052



Data Values

Attribute	ObjectID
Records	4
Empty	0
Average	2.500
Min	1.000
Max	4.000

ObjectID (none)

1.000 1.750 2.500 3.250 4.000



BaD

KkB

KkB

BaD BaD

KkB

TbB

BaD

TbB

BaD

EnC

GoF
GoF

W

W

BaF

TbB TbB

TbB

BaD

BaD

BaF

BaF

GcB

GfA

GcB

BaF

BaD

TbB

BaD

TcB2

TcB2

TbB

BaD

KkB

KkB

TbB

TbB

BaD

PLAT Results For: Stanly 6/21/2012 7:35:58 AM

INPUTS

Calendar Year: 2012
County: Stanly
Producer Identifier: hpf
Tract Number: 6033
Field Number: 1
Soil Series: BaD: Badin channery loam, 8 to 15 percent slopes
Crop: Soybeans (Double Cropped - Manured) : Conservation Tillage
- minimum residue
BMPs: Buffer Width Width = 10 ft.
Fertilizers: Swine-slurry
Yearly Applied Amount: 5 1000 gal
Lb P2O5: 22.37 lb
Application Method: All other surface applications
Soil Loss: 2 t/ac/yr
Receiving Slope Distance 10-19 ft
Soil Test 0" - 4" 119
WV_Factor (DATABASE) 1.1
Hydrologic Condition: GOOD

OUTPUTS

PARTICULATE P	=	10
SOLUBLE P	=	3
LEACHATE P	=	0
SOURCE P	=	13
<hr/>		
TOTAL P RATING	=	26 (MEDIUM)

PLAT Results For: Stanly 7/2/2012 7:47:07 AM

INPUTS

Calendar Year:	2012
County:	Stanly
Producer Identifier:	hpf
Tract Number:	6033
Field Number:	2
Soil Series:	BaD: Badin channery loam, 8 to 15 percent slopes
Crop:	Soybeans (Double Cropped - Manured) : Conservation Tillage
- minimum residue	
Fertilizers:	Swine-slurry
	Yearly Applied Amount: 5 1000 gal
	Lb P2O5: 22.37 lb
	Application Method: All other surface applications
Soil Loss:	2 t/ac/yr
Receiving Slope Distance	20-29 ft
Soil Test 0" - 4"	119
WV Factor (DATABASE)	1.1
Hydrologic Condition:	GOOD

OUTPUTS

PARTICULATE P	=	13
SOLUBLE P	=	3
LEACHATE P	=	0
SOURCE P	=	14

TOTAL P RATING =	30 (MEDIUM)
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PLAT Results For: Stanly 6/21/2012 7:37:08 AM

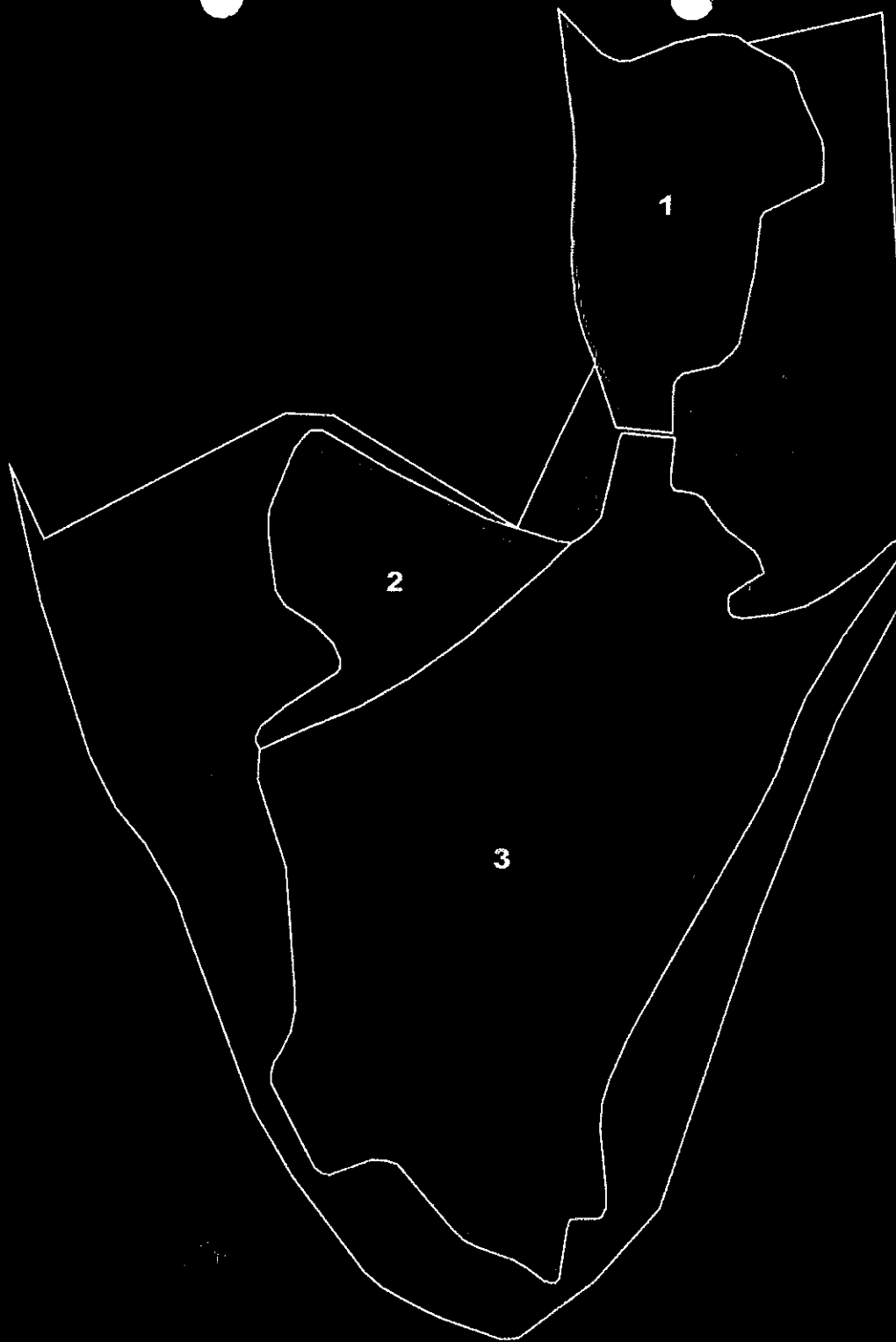
INPUTS

Calendar Year: 2012
 County: Stanly
 Producer Identifier: hpf
 Tract Number: 6033
 Field Number: 3
 Soil Series: BaD: Badin channery loam, 8 to 15 percent slopes
 Crop: Soybeans (Double Cropped - Manured) : Conservation Tillage
 - minimum residue
 BMPs: Buffer Width Width = 5 ft.
 Fertilizers: Swine-slurry
 Yearly Applied Amount: 5 1000 gal
 Lb P2O5: 22.37 lb
 Application Method: All other surface applications
 Soil Loss: 2 t/ac/yr
 Receiving Slope Distance 10-19 ft
 Soil Test 0" - 4" 119
 WV Factor (DATABASE) 1.1
 Hydrologic Condition: GOOD

OUTPUTS

PARTICULATE P = 13
 SOLUBLE P = 3
 LEACHATE P = 0
 SOURCE P = 13

TOTAL P RATING = 29 (MEDIUM)



USDA FSA Farm 6033 Tract 1289

1/4/2010

CLU: AC HEL-CRP

CLU Boundary

1: 8.86 HEL

CRP Boundary

2: 5.98 HEL

3: 33.48 HEL

Crop Ac: 48.32 CRP Ac: 0

Wetland Determination Identifiers

United States Department of Agriculture
Farm Service Agency Stanly County, NC

● Restricted Use

▽ Limited Restrictions

■ Exempt from Conservation
Compliance Provisions

0 170 340 680 1,020 1,360 Feet

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BaF

BaB

BaB

BaF

BaD

OaA

TbD

BaD

BaF

GoF

BaD

GoF

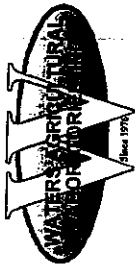
TbD

BaF



Waters Agricultural Laboratories, Inc.

P.O. Box 382 257 Newton Hwy
Camilla, GA 31730
(229) 336-7216 FAX (229) 336-7967



RN STATES

456

WILLE, NC 28103

Grower: RODNEY HONEYCUTT

Farm ID: HONEYCUTT

Soil Analysis Report

Received: 12/14/2011

Processed: 12/16/2011

NCDA Index

Number	Sample ID	OM%	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	Mn-I	Zn-I	Cu-I	S-I
59	Honeycutt	3.6	14.01	82.4	1.20	6.2	306	302	48.0	23.7	156	1199	487	60
60		3.5	11.44	82.1	1.00	6.3	215	250	50.0	21.2	128	1089	480	48
61		3.5	11.22	81.7	1.00	6.3	156	197	48.8	24.1	121	848	277	51
62		3.4	10.07	79.7	1.00	6.4	184	216	47.3	21.7	102	855	304	47
63		3.6	11.41	78.6	1.20	6.1	224	325	45.6	18.7	225	1066	479	75
64		3.8	10.74	81.0	1.00	6.0	265	287	48.6	19.0	137	1062	448	55
65		3.7	11.27	85.4	0.80	6.7	217	339	48.7	21.6	181	1173	492	33
66		4.1	13.84	82.0	1.20	6.5	246	401	47.2	20.1	125	1188	469	51
67		3.7	12.55	80.5	1.20	6.1	339	296	44.6	24.0	140	1342	464	56
68		3.1	14.83	86.0	1.00	6.7	359	209	51.3	27.7	103	907	330	60
69		2.9	11.47	82.1	1.00	6.3	304	169	45.3	29.5	125	703	255	52
70		2.5	9.46	78.4	1.00	6.1	151	157	44.8	25.3	112	319	159	51
71		3.0	8.93	77.3	1.00	6.0	82	263	45.7	16.8	93	272	164	32
72		3.1	9.36	69.8	1.40	6.0	104	327	38.0	14.3	84	431	245	35
73		2.9	8.33	70.9	1.20	6.0	103	289	39.5	14.0	131	347	201	35
74		3.2	9.89	71.4	1.40	6.1	96	315	39.9	15.5	140	508	261	31
75		2.8	9.29	65.3	1.60	6.2	83	332	34.7	12.7	153	323	201	35
76		3.2	9.51	70.2	1.40	6.0	84	221	41.7	16.8	146	326	161	40
77		2.7	12.92	87.1	0.80	6.1	245	214	47.8	31.0	487	784	233	111
78		3.0	12.71	83.8	1.00	6.1	309	159	46.3	31.2	334	753	248	60
79		3.7	15.86	84.3	1.20	6.2	467	196	44.2	34.0	253	1277	341	73
80		3.6	13.56	78.9	1.40	6.1	339	166	41.4	31.3	146	1033	283	58

yellow
Is
sludge
Apphec



Waters Agricultural Laboratories, Inc.

P.O. Box 382 257 Newton Hwy
Camilla, GA 31730
(229) 336-7216 FAX (229) 336-7967



SOUTHERN STATES
P.O. BOX 456
MARSHVILLE, NC 28103

Grower: RODNEY HONEYCUTT

Farm ID: HONEYCUTT

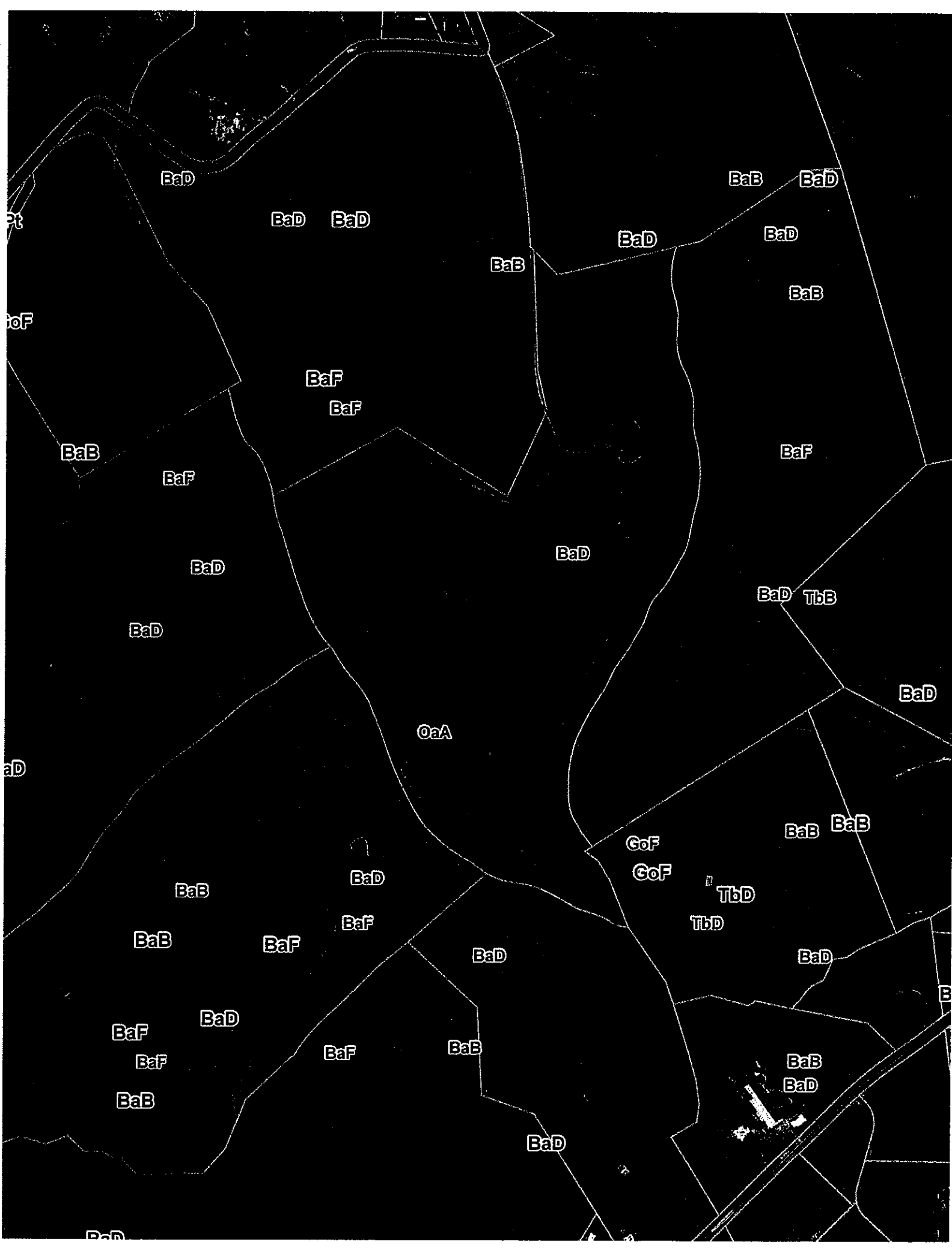
Soil Analysis Report

Received: 12/14/21

Processed: 12/16/21

NCDA Index

Lab Number	Sample ID	OM%	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	Mn-I	Zn-I	Cu-I	S-I
834014OC	81 Honeycutt	2.6	8.71	72.1	1.20	5.8	132	133	42.2	22.1	293	458	148	55
834015OC	82	3.1	10.02	75.7	1.20	5.9	103	153	49.0	19.1	409	290	157	63
834016OC	83	3.1	10.67	77.1	1.20	6.1	119	127	51.3	19.8	125	312	140	62
834017OC	84	2.8	11.17	78.0	1.20	6.3	340	172	41.3	20.1	212	819	223	83
834018OC	85	2.8	9.44	74.2	1.20	5.7	150	174	44.4	20.6	209	398	179	81



Tract 1226
Farm 6036

Field 1

Sample # 78-81

OM	CEC	BS	AC	PH	PI	KI	Ca	Mg	Mn	ZN	Cu	S
3.2	12.71	79.7	1.2	6.05	311.75	163.5	435	38.5	252.5	880	255	61.5

Tract 1768 Field 1
Farm # 6036

CEC	BS	AC	PH	PI	KI	Ca	Mg	Mn	ZN	Cu
11.8	83.8	1.06	6.2	239	290	48	21.5	152	1051	437

Tract 1768 Field 3
Farm 6036

CEC	BS	AC	PH	PI	KI	Ca	Mg	Mn	ZN	Cu
9.2	70.8	1.3	6	92	291	39.9	15	124	367	205

Tract 1768 Field 2 Sludge
6036

CEC	BS	AC	PH	PI	KI	Ca	Mg	Mn	ZN	Cu
11.9	80.5	1	6.3	171	178	47	27	113	643	248

Tract 10699 Farm 6052

CEC	BS	AC	PH	PI	KI	Ca	Mg	Mn	ZN	Cu
10.3	76	1.2	6	245	173	42.5	25	210	607	201

BaB

BaD

BaF

TbB

Finck

BaD

BaF

TbB

Community

BaD

BaF

BaD

TbD

GoF

TcD2

BaF

Countryside

GoF

ACKNOWLEDGEMENT OF THE POTENTIAL IMPACTS ON A SITE FROM APPLYING LAGOON SLUDGE

As part of either a lagoon closure operation or on-going lagoon maintenance, the attached plan has been developed to apply sludge to the following areas:

Track & Field Numbers: F6036^T - 1226^{Fields} 1-3 F6052^F 10699^T 10-11 F6036^F 1768^T Field 2

While using animal waste as a source of nutrients for crops in lieu of inorganic fertilizers is an ecologically sound practice, producers should be aware that sludge that accumulates in a lagoon may have high concentrations of nutrients and/or heavy metals. Accordingly, the quantity of phosphorous and micronutrients in the material to be applied may exceed the fertility requirements of planned crops.

Metals. High concentrations of metals in the soil can impact crop growth or yields. The application of lagoon sludge has the potential to significantly increase the concentration of metals (particularly copper and zinc) in the soil. NCSU and NCDA&CS recommend that alternative sites for waste application be sought when soil concentrations of zinc (Zn) exceed 142 lbs/ac (Zn-I of 2000) or copper (Cu) exceeds 72 lbs/ac (Cu-I of 2000). A Cu-I or Zn-I of 3000 is recognized as a critical toxic level for some crops. For peanuts, alternative sites are recommended when the Zn-I is 300, and a Zn-I of 500 is recognized as a critical toxic level. Producers should be aware of the post-application Cu and Zn concentrations predicted on the sites planned for sludge application. Additionally, soil pH should be maintained at 6.0 or above to minimize risk of toxicity.

Phosphorous. Phosphorous (P) concentration in lagoon sludge may be high. Because P adsorbs onto iron, aluminum, and calcium, the soil can bind and store excess P. When P concentrations reach higher concentrations, there is an increasing potential for P to be transported offsite and become a pollutant of surface waters. This transport may occur through soil erosion, or as a soluble form in surface runoff or leaching. An assessment of the risk for P loss to surface water is required as part of a nutrient management plan for permitted operations or those receiving federal or state cost-share assistance. If the potential for P transport offsite is high, then future federal application of animal waste may not be allowed in a nutrient management plan. Producers should be aware that applying lagoon sludge may limit the ability to use the site for future animal waste application. Accordingly, applying lagoon sludge to fields that are planned for future waste applications as part of a nutrient management plan is not advised.

*I understand that applying macronutrients or micronutrients at rates that significantly exceed the expected crop removal could limit the future use of the field as a waste application site, and in some cases, negatively impact future plant growth. I voluntarily agree to apply sludge to the fields identified above that I own or operate according to the attached nutrient management plan or lagoon closure plan. (*Both landowner and farmer/operator must sign.)*

Rodney K. Hargrett
Owner*

5-23-12
Date

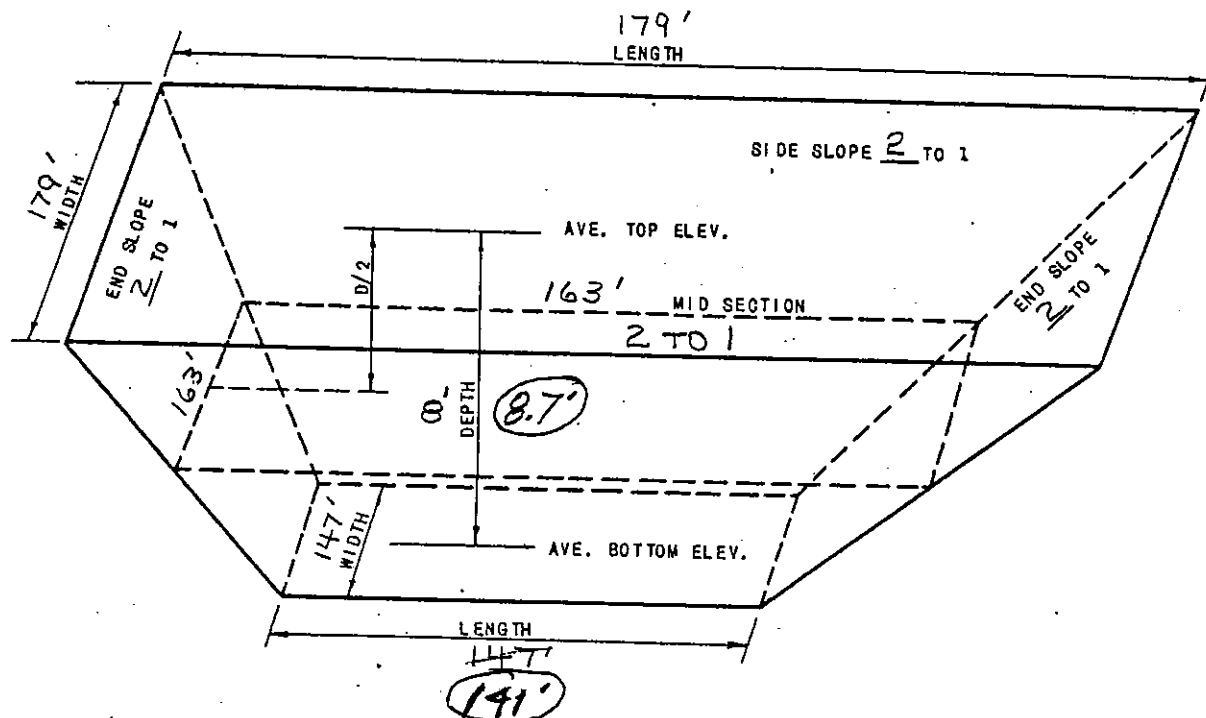
Farmer/Operator*

Date

LOCATION CODE _____

PLAN OF EXCAVATED WASTE STORAGE POND & LAGOON

NAME MELVIN HONEYCUTT ACP # _____ DATE 12/91 DISTRICT STANLY



$$\text{Volume} = \frac{\text{depth}}{6} \left[\text{area of top} + \text{area of bottom} + (4 \times \text{area midsection}) \right] = \frac{8.7}{6} \left[32,041 + 21,609 + (4 \times 106,276) \right] = 213,235 \text{ Cu. Ft.}$$

262,187

SUMMARY

Use of facility SWINE Waste

Capacity 213,235 Gallons ft³ Bottom

Elev. 89.0 (83.3)

Volume Cost-sharing _____ Cu. Ft.

Normal liquid level Elev. 92.0

Storage for normal precip. (Ft) + _____

Maximum liquid level Elev. 94.9

Storage for: _____

25 yr. freq. precip. (Ft.) + 0.6

Crest ESW Elev. 95.5

Stage (Ft.) + _____

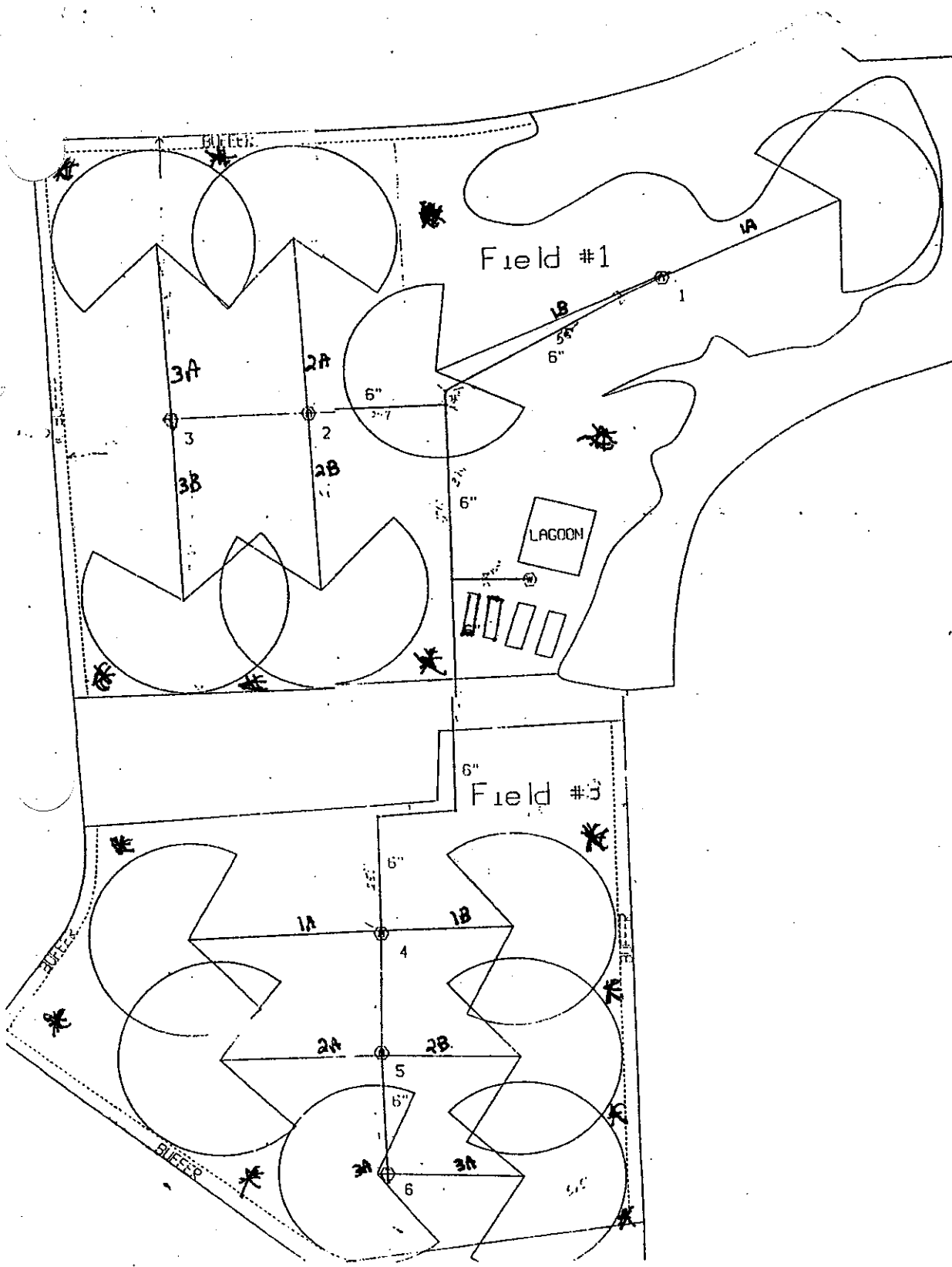
Freeboard (Ft.) + 1.0

Top of Dam Elev. 96.5

Soil type _____

B. M. description _____

_____ Elev. _____



Honeycutt Hog Farm

Rodney Honeycutt
 28378 Millingsport Road
 Albemarle, NC 27001
 704-982-1976

Pipe key

--- 6" PR200 Coated PVC Pipe

Sprinkler / Valve key

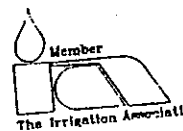
- (1) Hydrant + Tri-Action Valve 482.8 11
- (2) Hydrant + Air Release Valve 483.8 1
- (3) Drain Valve 2"
- (4) Water Supply

Gra-Mac Distributing

2310 NC Hwy. 601 N
 Mocksville, NC 27028
 Phone 910-998-3232
 Fax 910-998-3111

Designed by: David Graham
 Date: 4-11-96

Scale: 1" = 150' Design No.



These area's Are to be applied by Honeywagon

O&M Plan

NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE STANDARD

633-1

WASTE UTILIZATION (ACRE) CODE 633

DEFINITION

Using agricultural waste or other waste on land in an environmentally acceptable manner while maintaining or improving soil and plant resources.

PURPOSE

To safely use wastes to provide fertility for crop, forage, or fiber production; to improve or maintain soil structure; to prevent erosion; and to safeguard water resources.

CONDITIONS WHERE PRACTICE APPLIES

On soils and vegetation suitable for the use of waste as a fertilizer. This includes animal waste from farm and feedlot, municipal treatment plant, and agricultural processing plants.

CRITERIA

1. The waste utilization plan will include all the animal waste generated on the farm.
2. Animal waste shall not be applied to wetlands or surface water or shall not reach wetlands or surface waters of the state by runoff, drift, manmade conveyances, direct application, or direct discharge during operation or land application. Proper application rate and method shall be used to ensure that these specifications are met.
3. Animal waste shall be applied on land eroding at less than 5 tons per acre per year. Waste may be applied to land that is eroding at 5 or more tons but less than 10 tons per acre per year providing grass filter strips are installed where runoff leaves the field. (See Standard 393-Filter Strips)
4. Animal waste shall not be applied to saturated soils; during rainfall events, or when the surface is frozen. When animal waste is to be applied on areas subject to flooding, it will be soil incorporated on conventionally tilled cropland. When applied to conservation tilled crops or grassland, the waste may be broadcast provided the application does not occur during a season prone to flooding.
5. Waste shall not be applied more than 30 days prior to planting of the crop or forages breaking dormancy. A suitable cover crop should be planted to scavenge nutrients especially on leachable soils. Also on soils with a high potential for leaching, multiple applications at lower rates should be used.
6. Animal waste (other than swine waste from facilities sited on or after October 1, 1995,) shall not be applied closer than 25 feet to perennial waters. (See Standard 393 - Filter Strips).
7. Any new swine facility, sited on or after October 1, 1995, shall comply with N.C.G.S. 106-801 thru 805 as amended by Home Bill 515. These provisions are as follows: The outer perimeter of the land area onto which waste is applied from a lagoon that is a component of a swine farm shall be at least 75 feet from any residential property boundary and from any perennial stream or river other than an irrigation ditch or canal.
8. Animal waste shall not be applied closer than 100 feet to wells.

Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service.

9. Animal waste shall not be applied within 200 feet of dwellings other than those owned by the landowner.
10. Waste shall be applied in a manner not to reach other property and public right-of-ways.
11. Animal waste applied on grassed waterways shall be at agronomic rates and in a manner that causes no runoff or drift from the site.
12. The waste utilization plan will contain documentation that the producer has adequate means for disposal of the animal waste generated on the farm. One or a combination of the following will be utilized:
 - a) Producer owns adequate land for the use of wastes at agronomic rates.
 - b) If the producer does not own adequate land to properly use the waste, the technical specialist will evaluate the location of other land to determine the feasibility and practicability for land application.

The producer must have an agreement with the owner of the land he does not own. It is encouraged that this agreement be written. (See Exhibit B for a sample agreement)

 - c) Third party applicators may be used to apply waste on land that the producer does not own, or has agreement to land apply waste on. In this case the producer will obtain a certification from the applicator that waste will be applied in a manner that meets the waste utilization standard. The third party may use an alternative waste utilization system that has been accepted in writing by Division of Environmental Management (DEM). See Exhibit C for sample agreement.

- d) Producer has an alternative waste utilization system accepted in writing by DEM.
13. Apply animal waste at rates that do not exceed the Nitrogen needs for Realistic Yield Expectation (R. Y. E.) for the Crop being grown. See Nutrient Management Standard (590) for criteria on establishing RYE. Actual yields maybe used in lieu of realistic yield tables at the discretion of the planner. Regulations in some areas may be more restrictive and require application rates based on nutrients other than nitrogen.
14. Waste shall be tested within 60 days of utilization and soil shall be tested at least annually at crop sites where waste products are applied. Nitrogen shall be the rate-determining element. Zinc and Copper levels in the soils shall be monitored and alternative crop sites shall be used when these metals approach excess levels. The pH shall be adjusted for optimum crop production and maintained. Soil test and waste analysis records shall be kept for five years.
15. Liquid waste shall be applied at rates not to exceed the soil infiltration rate. No ponding shall occur.
16. Highly visible permanent markers shall be installed to mark the top and bottom elevations of the temporary storage (pumping volume) of all waste treatment lagoons. Pumping shall be managed to maintain the liquid level between the markers. A marker will be required to mark the maximum storage volume for waste storage ponds.
17. An irrigation design/plan shall be prepared as part of the waste utilization plan. The design will include the type of equipment, system layout, equipment settings, operating parameters, as well as the approximate maximum useable size of field, maximum application rate (in/hr) and maximum application per irrigation cycle. A map will be included that shows the fields and usable acres.

See Exhibit D for an example of irrigation design parameters.

18. Records of waste application shall be maintained to establish actual application rates. The record will include date of application, amount of waste applied per acre by tract number and field number, most recent waste analysis and soil test report, and the realistic yield expectation (R.Y.E.) nitrogen rate. See Exhibit E for an acceptable form. Computer spreadsheets are acceptable. All waste application records shall be maintained for three (3) years. See Exhibit F for an acceptable form.
19. The waste utilization plan shall include the number of acres that will be required for land application for a 5 year accumulation of sludge in waste treatment lagoons based on current agronomic rates. The sludge shall be analyzed prior to application.
20. A group of tables showing the plant available nutrients for the most commonly used animal operations are found on pages 633-7 thru 633-107 of this standard. For other types of animals or operations, contact the engineer assigned to provide assistance to your field office. He/she has a complete set of tables.
21. Land clearing for waste utilization shall be completed before certification. Cover must be established within 30 days of clearing.
22. Reduce hayland nitrogen rate by 25% on grassland being grazed when applying animal waste. For each ton of hay harvested from a pasture system, the full R. Y. E. hay application rate for nitrogen may be applied.
23. The Natural Resources Conservation Service (formerly SCS) Agriculture Waste Management Field Handbook (AWMFH) is a reference document that

may be used to assist in developing waste management plans.

24. An Emergency Action Plan is required. This plan shall include provisions for emergency spreading or transfer of waste from all waste storage structures in the system. This plan shall provide for emergency spreading of waste to prevent overtopping or other discharges during periods when soil or crop conditions are not conducive to normal spreading. The Emergency Action Plan shall include but not be limited to the following:
 - a) Contact DEM immediately when potential overtopping or other discharges conditions exists.
 - b) Specify fields on which waste will be applied.
 - c) Specify methods and rates at which waste will be spread.
 - d) Specify minimum buffer areas which may be greater than specified during normal spreading.
 - e) Specify location and manner of waste transfer.

CONSIDERATIONS

1. A waste utilization plan is based on average nutrient content and may vary by as much as plus or minus 20%. To properly implement this plan based on actual waste analysis you may need additional acres or to reduce animal numbers.
2. Evaluation of the soil analysis should consider concentration of elements to assess potential toxicity or whether increased concentrations of one element (such as Phosphorus) have reduced the availability of another element (such as Zinc) to plants.
3. Plant tissue analysis is recommended to evaluate nutrient status and confirm that nitrogen is not excessive.
4. Use a method of spreading that will result in uniform application of material at specified

rates. Proper calibration of equipment should be done to assure desired spreading rates.

5. Animal waste should be applied on actively growing crops in such a manner that the crop is not covered with waste to a depth that would inhibit growth. The potential for salt damage from animal waste should be considered also.
6. Odors can be reduced by injecting the waste into soil or disking after waste application. Waste should not be applied when there is danger of drift from the irrigation field.
7. Producers are encouraged to take samples of groundwater and surface water on farms where animal waste is routinely applied. Samples should be analyzed for nutrients and bacteria.
8. Producer should remove hay from the fields within one year to prevent reintroduction of nutrients into the environment.
9. A grazing plan should be developed to encourage controlled frequent rotational grazing, multiple drinking water sites, and strategic harvesting to optimize fecal and urine distribution by grazing animals. These practices will minimize potential pollution from areas around stock camps, shade trees, water tanks, and other heavy use areas.
10. Animal waste can be used in a rotation that includes vegetables and other crops for direct human consumption. However, if animal waste is used on crops for direct human consumption it should only be applied preplant with no further applications of animal waste during the crop season.
11. Properly treated municipal sludge may be applied to agricultural land at agronomic rates in order to use the nutrients for the production of agricultural crops. Before use, all sludge must be analyzed for toxic or hazardous components. The United States Environmental Protection Agency has a comprehensive standard for the use and disposal of sewage sludge (40 CFR Part 503, printed in the Federal Register 2/19/93). The

standards for use and disposal of sewage sludge for the 503 Rule apply only to those residuals or biosolids which are generated from the treatment of domestic sewage. This also includes domestic septage, pumped from septic tanks. Sewage sludge that does not meet the 503 criteria and other residuals from industrial sources must follow the rules established and outlined in the EPA Process Design Manual for Land Application of Municipal Sludge (EPA-625/1-83-016, Oct. 1983).

The State of North Carolina also has a number of regulations and guidelines which must be adhered to in order to protect health and environmental quality. A permit from DEM must be obtained. The permit can be applied for by any party desiring responsibility for the application. Typically, it has been applied for by a sludge generator or landowner that receives the sludge or by a waste management contractor. In addition, a written notarized contract detailing responsibilities of the parties involved is required. A significant amount of supporting information such as an evaluation of soil suitability for application of sludge, site evaluation for sludge application, sludge analysis for heavy metals and nutrients and soil test for nutrients, cation exchange capacity, and the presence of heavy metals in milliequivalents per 100 grams of soil must accompany the permit application.

Many sludges contain heavy metals which may have an adverse effect on crop production and/or the food chain. Table 1 lists criteria from the Environmental Protection Agency's Regulations on Land Application of Sewage Sludge (40 CFR Part 503). The figures set performance standards for metal loading rates. In addition to lifetime loading rates, DEM suggests that not more than 1/20 of the lifetime limit be applied any one (1) year. No material deemed toxic or hazardous is suitable for routine land application. To maintain the long term productivity of North Carolina crop land, heavy metals like copper and zinc should not accumulate to levels that are toxic

to plants. There is a significant deficit in the knowledge base concerning the specific soil index value at which plant toxicity occurs.

The phytotoxic level is affected by pH.

Peanuts are damaged by Zinc when the index for that nutrient reaches 500 (20 ppm) at a pH of 6.0. For other crops, when soil test values reach the levels in Table 2, then close monitoring of crop growth and plant tissue levels are suggested.

ANIMAL WASTE LAND APPLICATION SETBACKS*
UPDATED SEPTEMBER 20, 2006
SB 1217 INTERAGENCY GROUP

Setbacks for swine waste land application areas vary according to permit, the date of facility siting and/or the date the waste application field is placed in use. Setbacks for other types of operations with coverage under State General Permits and as defined in G.S. 143-215.10B, have a single setback requirement. The following outline provides setback requirements by time periods and legislation.

- All operations meeting the G.S. 143-215.10B definitions (formerly 2H.0200 thresholds), including swine farms sited or expanded before September 30, 1995 are required to have from the outer perimeter of the waste application area the following:

- A. A 25-foot vegetative buffer from perennial water (2H.0217 (h)(iii))
- B. A 200-foot distance to dwelling not owned by the producer (NRCS Standard Code 633)
- C. A 100-foot distance to a well (NRCS Standard Code 633 Standard)

For swine farms with a waste application field put in place after August 27, 1997 category IV applies:

- II. Swine farms sited after September 30, 1995 and constructed or expanded before August 27, 1997 must meet items I A, B, and C and have from the outer perimeter of the waste application area the following:
 - A. A 50-foot distance to perennial stream/river other than an irrigation ditch or canal (Senate Bill 1080)
 - B. A 50-foot distance to a residential property boundary (Senate Bill 1080)

For waste application fields put in place after August 27, 1997 category IV applies:

- III. Swine farms sited or expanded after August 27, 1997 must meet the requirements of items I A, B, and C and must have from the outer perimeter of the waste application area the following:
 - A. A 75-foot distance to a perennial stream/river other than an irrigation ditch or canal (House Bill 515)
 - B. A 75-foot distance to a residential property boundary (House Bill 515)

- IV. Any swine farm regardless of siting date must meet the 75-foot requirements of item III for any new waste application field put in use after August 27, 1997 which:

- A. As of August 27, 1997, the waste application field was not within the property boundary where the waste was generated or
- B. As of August 27, 1997, the waste application field was not within the property boundary where waste was previously applied from the operation.

Other new waste application fields within the property boundary where the waste is generated or has been previously applied are not required to meet the 75-foot buffer, but must comply with items I and II.

* Guidance does not reflect Neuse, Tar-Pam and Jordan Lake Rule requirements

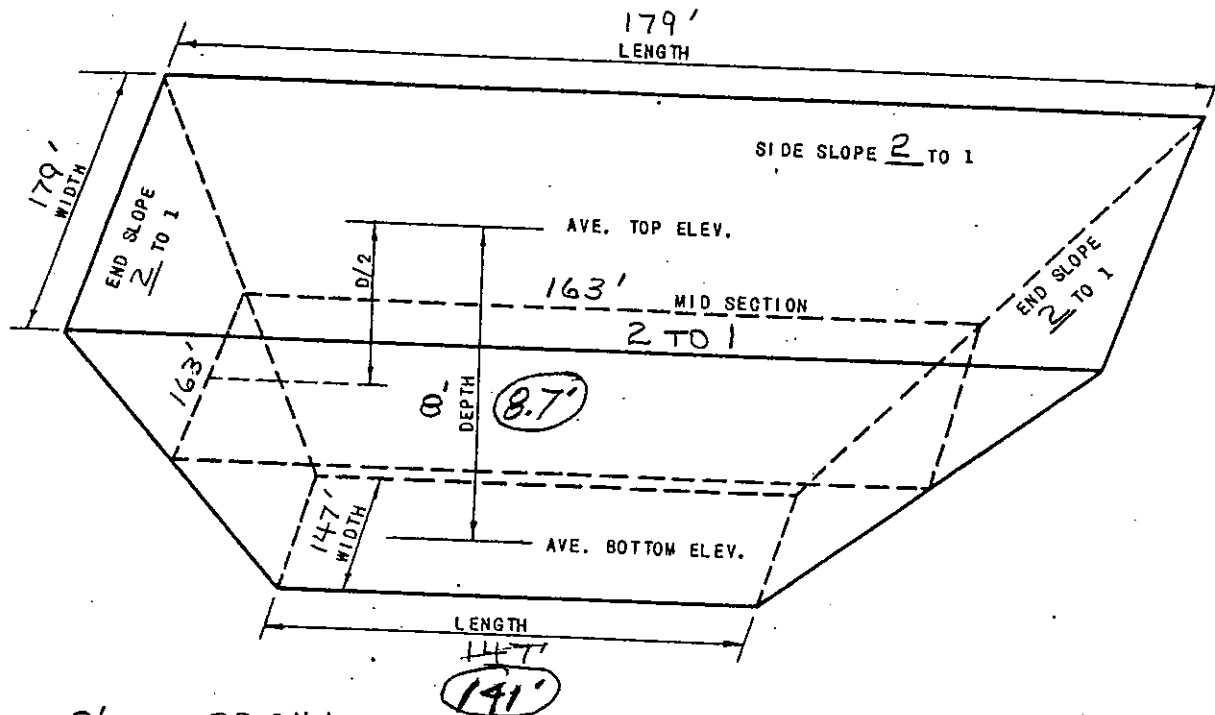
V. All farms renewing NPDES permits after that date must implement one or a combination of the following waste application setbacks from surface waters including streams, lakes, and other surface waters, and conduits to those waters (40 CFR 412.4):

- A. 100-foot setback (no closer than 100 feet to any down-gradient surface waters, open tile line intake structures, sinkholes, agricultural well heads, or other conduits to surface waters);**
- B. 35-foot wide vegetated buffer can be substituted for the 100-foot setback specified in A;**
- C. 20-foot wide vegetated setback with water table control structures to trap particulate nutrient losses, or any other compliance alternative approved by the Director of DWQ that provides pollutant reductions equivalent or better than reductions achieved by the 100-foot setback specified in A.**

STATION CODE _____

PLAN OF EXCAVATED WASTE STORAGE POND & LAGOON

NAME MELVIN HONEYCUTT ACP # _____ DATE 12/91 DISTRICT STANLY



$$\text{Volume} = \frac{\text{depth}}{6} \left[\text{area of top} + (\text{area of bottom}) + (4 \times \text{area midsection}) \right] = \frac{8}{6} \left[32,041 + 21,609 + (4 \times 106,276) \right] = 213,235 \text{ Cu.Ft.}$$

262,187

Use of facility SWINE Waste

Capacity 213,235 Gallons ft^3 Bottom

Volume Cost-sharing _____ Cu. Ft.

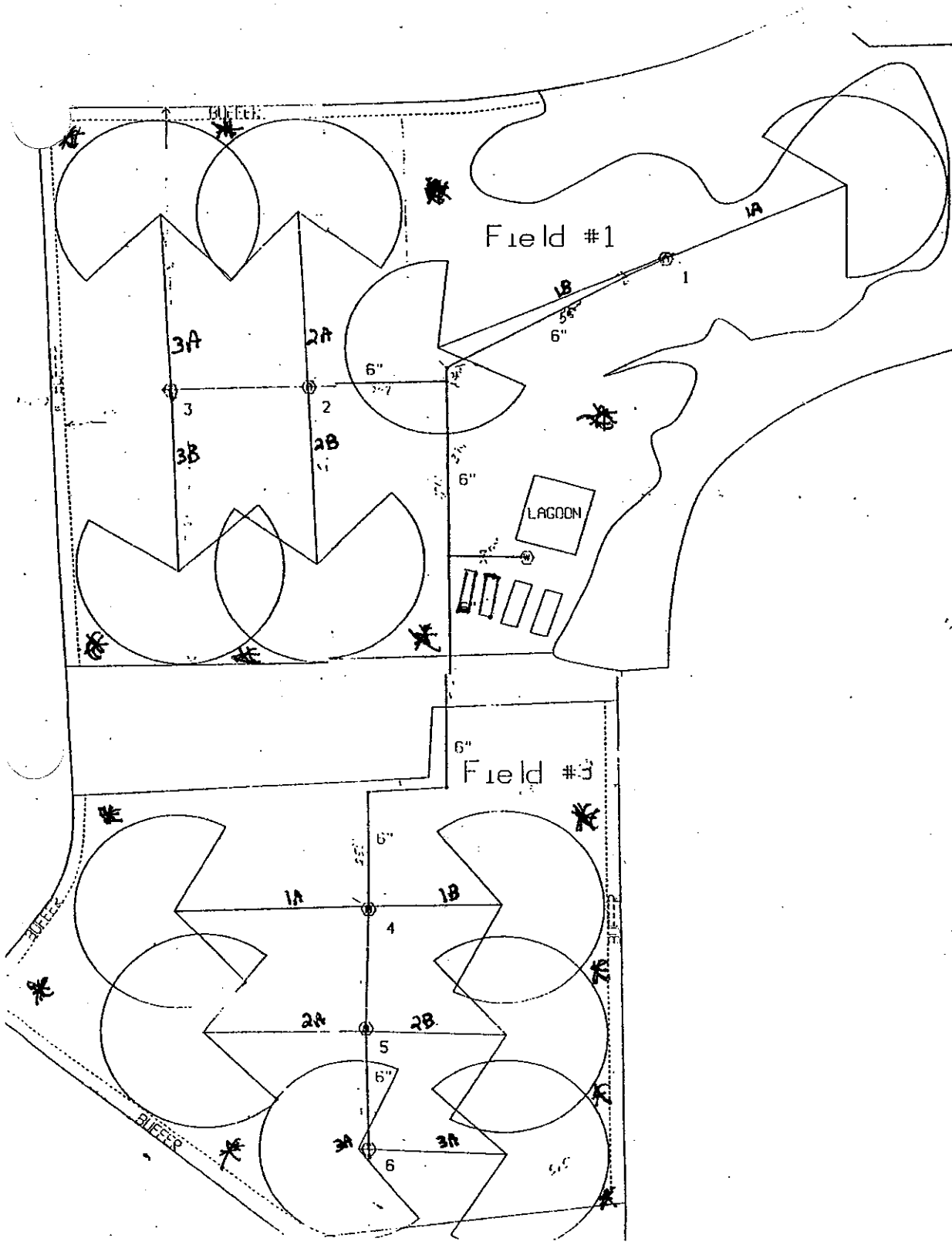
Soil type _____

B. M. description _____

_____ Elev. _____

SUMMARY

Normal liquid level	Elev.	<u>89.0</u> <u>(83.3)</u>
Storage for normal precip. (Ft.) +	Elev.	<u>92.0</u>
Maximum liquid level	Elev.	<u>94.9</u>
Storage for:		
25 yr. freq. precip. (Ft.) +		<u>0.6</u>
Crest ESW	Elev.	<u>95.5</u>
Stage (Ft.) +		<u>—</u>
Freeboard (Ft.) +		<u>1.0</u>
Top of Dam	Elev.	<u>96.5</u>



Honeycutt Hog Farm

Rodney Honeycutt
 28378 Millington Road
 Albemarle, NC 28001
 704-982-1978

Pipe key

--- 6" FR200 Coated PVC Pipe

Sprinkler / Valve key

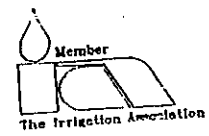
- ① Hydrant + Tri-Action Valve 482A 11
- ② Hydrant + Air Release Valve 483B 1
- ③ Drain Valve 2"
- ④ Water Supply

Gra-Mac Distributing

2310 NC Hwy. 801 N
 Mocksville, NC 27028
 Phone 910-998-3232
 Fax 910-998-3111

Designed by: David Graham
 Date: 4-11-98

Scale: 1" = 150' Design. No.



These area's Are to be applied by Honeywagon

Tract 1226
Farm 6036

Field 1

Sample # 78-81

OM	CEC	BS	AC	PH	PI	KI	Ca	Mg	Mn	ZN	Cu	S
3.2	12.71	79.7	1.2	6.05	311.75	163.5	435	38.5	252.5	880	255	61.5

Tract 1768 Field 1

Farm # 6036

CEC	BS	AC	PH	PI	KI	Ca	Mg	Mn	ZN	Cu
11.8	83.8	1.06	6.2	239	290	48	21.5	152	1051	437

Tract 1768 Field 3

Farm 6036

CEC	BS	AC	PH	PI	KI	Ca	Mg	Mn	ZN	Cu
9.2	70.8	1.3	6	92	291	39.9	15	124	367	205

Tract 1768 Field 2 Sludge

6036

CEC	BS	AC	PH	PI	KI	Ca	Mg	Mn	ZN	Cu
11.9	80.5	1	6.3	171	178	47	27	113	643	248

Tract 10699 Farm 6052

CEC	BS	AC	PH	PI	KI	Ca	Mg	Mn	ZN	Cu
10.3	76	1.2	6	245	173	42.5	25	210	607	201



Waters Agricultural Laboratories, Inc.
P.O. Box 382 257 Newton Hwy
Camilla, GA 31730
(229) 336-7216 FAX (229) 336-7967



RN STATES
456
VILLE, NC 28103

Grower: RODNEY HONEYCUTT
Farm ID: HONEYCUTT

Soil Analysis Report

Received: 12/14/2011
Processed: 12/16/2011

NCDA Index

Number	Sample ID	OM%	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	Mn-I	Zn-I	Cu-I	S-I
59	Honeyc.H	3.6	14.01	82.4	1.20	6.2	306	302	48.0	23.7	156	1199	487	60
60		3.5	11.44	82.1	1.00	6.3	215	250	50.0	21.2	128	1089	480	48
61		3.5	11.22	81.7	1.00	6.3	156	197	48.8	24.1	121	648	277	51
62		3.4	10.07	79.7	1.00	6.4	184	210	47.3	21.7	102	855	304	47
63		3.6	11.41	78.8	1.20	6.1	224	325	45.6	18.7	225	1066	479	75
64		3.8	10.74	81.0	1.00	6.0	285	287	48.6	19.0	137	1062	448	55
65		3.7	11.27	85.4	0.80	6.7	217	339	48.7	21.6	181	1173	492	33
66		4.1	13.64	82.0	1.20	6.5	246	401	47.2	20.1	125	1188	469	51
67		3.7	12.55	80.5	1.20	6.1	339	296	44.6	24.0	140	1342	464	56
68		3.1	14.83	86.0	1.00	6.7	359	209	51.3	27.7	103	907	330	60
69		2.9	11.47	82.1	1.00	6.3	304	169	45.3	29.5	125	703	255	52
70		2.5	9.46	78.4	1.00	6.1	151	157	44.8	25.3	112	319	159	51
71		3.0	8.93	77.3	1.00	6.0	82	263	45.7	16.8	93	272	164	32
72		3.1	9.36	69.8	1.40	6.0	104	327	38.0	14.3	84	431	245	35
73		2.9	8.33	70.9	1.20	6.0	103	289	39.5	14.0	131	347	201	35
74		3.2	9.89	71.4	1.40	6.1	96	315	39.9	15.5	140	508	261	31
75		2.8	9.29	65.3	1.60	6.2	83	332	34.7	12.7	153	323	201	35
76		3.2	9.51	70.2	1.40	6.0	84	221	41.7	16.8	146	326	161	40
77		2.7	12.92	87.1	0.80	6.1	245	214	47.8	31.0	487	784	233	111
78		3.0	12.71	83.8	1.00	6.1	309	159	46.3	31.2	334	753	248	60
79		3.7	15.86	84.3	1.20	6.2	467	196	44.2	34.0	253	1277	341	73
80		3.6	13.56	78.9	1.40	6.1	339	166	41.4	31.3	146	1033	283	58

yellow
Is
Sludge
Applied



Waters Agricultural Laboratories, Inc.

P.O. Box 382 257 Newton Hwy
Camilla, GA 31730
(229) 336-7216 FAX (229) 336-7967



SOUTHERN STATES
P.O. BOX 456
MARSHVILLE, NC 28103

Grower: RODNEY HONEYCUTT
Farm ID: HONEYCUTT

Soil Analysis Report

Received: 12/14/201

Processed: 12/16/201

NCDA Index

Lab Number	Sample ID	OM%	CEC	BS%	Ac	pH	P-I	K-I	Ca%	Mg%	Mn-I	Zn-I	Cu-I	S-I
834014OC	81 Honeycutt	2.6	8.71	72.1	1.20	5.8	132	133	42.2	22.1	293	458	148	55
834015OC	82	3.1	10.02	75.7	1.20	5.9	103	153	49.0	19.1	409	290	157	63
834016OC	83	3.1	10.67	77.1	1.20	6.1	119	127	51.3	19.8	125	312	140	62
834017OC	84	2.8	11.17	78.0	1.20	6.3	340	172	41.3	28.1	212	819	223	83
834018OC	85	2.8	9.44	74.2	1.20	5.7	150	174	44.4	20.6	209	396	179	81

EMERGENCY ACTION PLAN

PHONE NUMBERS

DWQ 704-663-1699
EMERGENCY MANAGEMENT SYSTEM 911
SWCD 704-982-6811
NRCS 704-982-5114

This plan will be implemented in the event that wastes from your operation are leaking, overflowing, or running off site. You should not wait until wastes reach surface waters or leave your property to consider that you have a problem. You should make every effort to ensure that this does not happen. This plan should be posted in an accessible location for all employees at the facility. The following are some action items you should take.

1. Stop the release of wastes. Depending on the situation, this may or may not be possible. Suggested responses to some possible problems are listed below.

A. Lagoon overflow-possible solutions are:

- a. Add soil to berm to increase elevation of dam.
- b. Pump wastes to fields at an acceptable rate.
- c. Stop all flows to the lagoon immediately.
- d. Call a pumping contractor.
- e. Make sure no surface water is entering lagoon.

B. Runoff from waste application field-actions include:

- a. Immediately stop waste application.
- b. Create a temporary diversion to contain waste.
- c. Incorporate waste to reduce runoff.
- d. Evaluate and eliminate the reason(s) that caused the runoff.
- e. Evaluate the application rates for the fields where runoff occurred.

C. Leakage from the waste pipes and sprinklers-action include:

- a. Stop recycle pump.
- b. Stop irrigation pump.
- c. Close valves to eliminate further discharge.
- d. Repair all leaks prior to restarting pumps.

D. Leakage from flush systems, houses, solid separators-action include:

- a. Stop recycle pump.
- b. Stop irrigation pump.
- c. Make sure no siphon occurs.
- d. Stop all flows in the house, flush systems, or solid separators.
- e. Repair all leaks prior to restarting pumps.

E. Leakage from base or sidewall of lagoon. Often this is seepage as opposed to

- a. Dig a small sump or ditch away from the embankment to catch all seepage, put in a submersible pump, and pump back to the lagoon.
- b. If holes are caused by burrowing animals, trap or remove animals and fill holes and compact with a clay type soil.
- c. Have a professional evaluate the condition of the side walls and lagoon bottom as soon as possible.

2. Assess the extent of the spill and note any obvious damages.

- a. Did the waste reach any surface waters?
- b. Approximately how much was released and for what duration?
- c. Any damage noted, such as employee injury, fish kills, or property damage?
- d. Did the spill leave the property?
- e. Does the spill have the potential to reach surface waters?
- f. Could a future rain event cause the spill to reach surface waters?
- g. Are potable water wells in danger (either on or off of the property)?
- h. How much reached surface waters?

3. Contact appropriate agencies.

- a. During normal business hours, call your DWQ (Division of Water Quality) regional office; Phone - - -. After hours, emergency number: 919-733-3942. Your phone call should include: your name, facility, telephone number, the details of the incident from item 2 above, the exact location of the facility, the location or direction of movement of the spill, weather and wind conditions. The corrective measures that have been under taken, and the seriousness of the situation.
- b. If spill leaves property or enters surface waters, call local EMS phone number - - -.
- c. Instruct EMS to contact local Health Department.
- d. Contact CES, phone number - - -, local SWCD office phone number - - -, and local NRCS office for advice/technical assistance phone number - - -.

4. If none of the above works call 911 or the Sheriff's Department and explain your problem to them and ask that person to contact the proper agencies for you.

5. Contact the contractor of your choice to begin repair of problem to minimize off-site damage.
 - a. Contractors Name: _____
 - b. Contractors Address: _____
 - c. Contractors Phone: _____

6. Contact the technical specialist who certified the lagoon (NRCS, Consulting Engineer, etc.).
 - a. Name: _____
 - b. Phone: _____

7. Implement procedures as advised by DWQ and technical assistance agencies to rectify the damage, repair the system, and reassess the waste management plan to keep problems with release of wastes from happening again.

Insect Control Checklist for Animal Operations

Source	Cause	BMPs to Control Insects	Site Specific Practices
Liquid Systems			
Flush gutters	<ul style="list-style-type: none"> Accumulation of solids 	<input checked="" type="checkbox"/> Flush system is designed and operated sufficiently to remove accumulated solids from gutters as designed <input checked="" type="checkbox"/> Remove bridging of accumulated solids at discharge	
Lagoons and pits	<ul style="list-style-type: none"> Crusted solids 	<input checked="" type="checkbox"/> Maintain lagoons, settling basins and pits where pest breeding is apparent to minimize the crusting of solids to a depth of no more than 6 to 8 inches over more than 30 percent of surface	
Excessive vegetative growth	<ul style="list-style-type: none"> Decaying vegetation 	<input checked="" type="checkbox"/> Maintain vegetative control along banks of lagoons and other impoundments to prevent accumulation of decaying vegetative matter along water's edge on impoundment's perimeter.	
Dry Systems			
Feeders	<ul style="list-style-type: none"> Feed spillage 	<input checked="" type="checkbox"/> Design, operate, and maintain feed systems (e.g., bunkers and troughs) to minimize the accumulation of decaying wastage <input checked="" type="checkbox"/> Clean up spillage on a routine basis (e.g., 7- to 10-day interval during summer; 15- to 30-day interval during winter)	

J Barker

12/6/87

Insect Control Checklist for Animal Operations

Source	Cause	BMPs to Control Insects	Site Specific Practices
Feed storage	<ul style="list-style-type: none"> Accumulations of feed residues 	<input checked="" type="checkbox"/> Reduce moisture accumulation within and around immediate perimeter of feed storage areas by ensuring drainage is away from site and/or providing adequate containment (e.g., covered bin for brewer's grain and similar high moisture grain products) <input checked="" type="checkbox"/> Inspect for and remove or break up accumulated solids in filter strips around feed storage as needed	
Animal holding areas	<ul style="list-style-type: none"> Accumulations of animal wastes and feed wastage 	<input checked="" type="checkbox"/> Eliminate low areas that trap moisture along fences and other locations where waste accumulates and disturbance by animals is minimal <input checked="" type="checkbox"/> Maintain fence rows and filter strips around animal holding areas to minimize accumulations of wastes (i.e., inspect for and remove or break up accumulated solids as needed)	
Dry manure handling systems	<ul style="list-style-type: none"> Accumulations of animal wastes 	<input type="checkbox"/> Remove spillage on a routine basis (e.g., 7- to 10-day interval during summer; 15- to 30-day interval during winter) where manure is loaded for land application or disposal <input type="checkbox"/> Provide for adequate drainage around manure stockpiles <input type="checkbox"/> Inspect for and remove or break up accumulated wastes in filter strips around stockpiles and manure handling areas as needed	<div style="text-align: right;"> <i>J. B. Kane</i> <i>12/15/97</i> </div>

For more information contact:

Cooperative Extension Service, Department of Entomology, Box 7613, North Carolina State University, Raleigh, NC 27695-7613.

Swine Farm Waste Management Odor Control Checklist

Source	Cause	BMPs to Minimize Odor	Site Specific Practices
Farmstead	<ul style="list-style-type: none"> Swine production 	<input checked="" type="checkbox"/> Vegetative or wooded buffers <input checked="" type="checkbox"/> Recommended best management practices <input checked="" type="checkbox"/> Good judgment and common sense	
Animal body surfaces	<ul style="list-style-type: none"> Dirty manure-covered animals 	<input checked="" type="checkbox"/> Dry floors	
Floor surfaces	<ul style="list-style-type: none"> Wet manure-covered floors 	<input checked="" type="checkbox"/> Slotted floors <input checked="" type="checkbox"/> Waterers located over slotted floors <input type="checkbox"/> Feeders at high end of solid floors <input checked="" type="checkbox"/> Scrape manure buildup from floors <input checked="" type="checkbox"/> Underfloor ventilation for drying	
Manure collection pits	<ul style="list-style-type: none"> Urine Partial microbial decomposition 	<input checked="" type="checkbox"/> Frequent manure removal by flush, pit recharge, or scrape <input checked="" type="checkbox"/> Underfloor ventilation	
Ventilation exhaust fans	<ul style="list-style-type: none"> Volatile gases Dust 	<input checked="" type="checkbox"/> Fan maintenance <input checked="" type="checkbox"/> Efficient air movement	
Indoor surfaces	<ul style="list-style-type: none"> Dust 	<input checked="" type="checkbox"/> Washdown between groups of animals <input checked="" type="checkbox"/> Feed additives <input type="checkbox"/> Feeder covers <input type="checkbox"/> Feed delivery downspout extenders to feeder covers	<i>J. B. Gans</i> <i>12/15/97</i>
Flush tanks	<ul style="list-style-type: none"> Agitation of recycled lagoon liquid while tanks are filling 	<input type="checkbox"/> Flush tank covers <input checked="" type="checkbox"/> Extend fill lines to near bottom of tanks with anti-siphon vents	

Swine Farm Waste Management Odor Control Checklist

Source	Cause	BMPs to Minimize Odor	Site Specific Practices
Storage tank or basin surface	<ul style="list-style-type: none"> • Partial microbial decomposition • Mixing while filling • Agitation when emptying 	<input checked="" type="checkbox"/> Bottom or midlevel loading <input type="checkbox"/> Tank covers <input type="checkbox"/> Basin surface mats of solids <input checked="" type="checkbox"/> Proven biological additives or oxidants	
Settling basin surface	<ul style="list-style-type: none"> • Partial microbial decomposition • Mixing while filling • Agitation when emptying 	<input type="checkbox"/> Extend drainpipe outlets underneath liquid level <input checked="" type="checkbox"/> Remove settled solids regularly	
Manure, slurry, or sludge spreader outlets	<ul style="list-style-type: none"> • Agitation when spreading • Volatile gas emissions 	<input type="checkbox"/> Soil injection of slurry/sludges <input checked="" type="checkbox"/> Wash residual manure from spreader after use <input checked="" type="checkbox"/> Proven biological additives or oxidants	
Uncovered manure, slurry, or sludge on field surfaces	<ul style="list-style-type: none"> • Volatile gas emissions while drying 	<input type="checkbox"/> Soil injection of slurry/sludges <input type="checkbox"/> Soil incorporation within 48 hours <input checked="" type="checkbox"/> Spread in thin uniform layers for rapid drying <input checked="" type="checkbox"/> Proven biological additives or oxidants	
Dead animals	<ul style="list-style-type: none"> • Carcass decomposition 	<input checked="" type="checkbox"/> Proper disposition of carcasses	
Dead animal disposal pits	<ul style="list-style-type: none"> • Carcass decomposition 	<input checked="" type="checkbox"/> Complete covering of carcasses in burial pits <input checked="" type="checkbox"/> Proper location/construction of disposal pits	<i>J. Benker</i>
Incinerators	<ul style="list-style-type: none"> • Incomplete combustion 	<input type="checkbox"/> Secondary stack burners	
Standing water around facilities	<ul style="list-style-type: none"> • Improper drainage • Microbial decomposition of organic matter 	<input checked="" type="checkbox"/> Grade and landscape such that water drains away from facilities	12/15/97

Swine Farm Waste Management Odor Control Checklist

Source	Cause	BMPs to Minimize Odor	Site Specific Practices
Flush alleys	<ul style="list-style-type: none"> Agitation during wastewater conveyance 	<input type="checkbox"/> Underfloor flush with underfloor ventilation	
Pit recharge points	<ul style="list-style-type: none"> Agitation of recycled lagoon liquid while pits are filling 	<input checked="" type="checkbox"/> Extend recharge lines to near bottom of pits with anti-siphon vents	
Lift stations	<ul style="list-style-type: none"> Agitation during sump tank filling and drawdown 	<input type="checkbox"/> Sump tank covers	
Outside drain collection or junction boxes	<ul style="list-style-type: none"> Agitation during wastewater conveyance 	<input type="checkbox"/> Box covers	
End of drainpipes at lagoon	<ul style="list-style-type: none"> Agitation during wastewater conveyance 	<input type="checkbox"/> Extend discharge point of pipes underneath lagoon liquid level	<i>J. Ben-king</i>
Lagoon surfaces	<ul style="list-style-type: none"> Volatile gas emissions Biological mixing Agitation 	<input checked="" type="checkbox"/> Proper lagoon liquid capacity <input checked="" type="checkbox"/> Correct lagoon startup procedures <input checked="" type="checkbox"/> Minimum surface area-to-volume ratio <input checked="" type="checkbox"/> Minimum agitation when pumping <input type="checkbox"/> Mechanical aeration <input checked="" type="checkbox"/> Proven biological additives	12/15/97
Irrigation sprinkler nozzles	<ul style="list-style-type: none"> High pressure agitation Wind drift 	<input checked="" type="checkbox"/> Irrigate on dry days with little or no wind <input checked="" type="checkbox"/> Minimum recommended operating pressure <input checked="" type="checkbox"/> Pump intake near lagoon liquid surface <input type="checkbox"/> Pump from second-stage lagoon	

Mortality Management Methods
(check which method(s) are being implemented)

- ☐ Burial three feet beneath the surface of the ground within 24 hours after knowledge of the death. The burial must be at least 300 feet from any flowing stream or public body of water.
- ☒ Rendering at a rendering plant licensed under G.S. 106-168.7
- ☐ Complete incineration
- ☐ In the case of dead poultry only, placing in a disposal pit of a size and design approved by the Department of Agriculture
- ☐ Any method which in the professional opinion of the State Veterinarian would make possible the salvage of part of a dead animal's value without endangering human or animal health. (Written approval of the State Veterinarian must be attached)